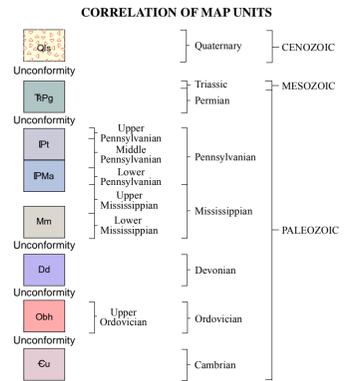


EXPLANATION



- Qs** Landslide deposits—Rock debris with some identifiable bedrock; mapped occurrences are in the Amsden Formation
- RPg** Goose Egg Formation—Deep red calcareous and gypsiferous siltstone interbedded with pale green to purple dolomite and dolomitic limestone containing gypsum; several massive, pale gray to white gypsum beds; ranges from 250 to 300 feet (76 to 91 m) thick
- Pt** Tensleep Sandstone—White to light gray, very fine grained to fine-grained sandstone which is often calcareous; thick-bedded, finely laminated with cross-bedding; some units thin-bedded. Sandy dolomite beds with small lateral extent. Contact with overlying Goose Egg Formation sometimes marked by chert and limestone pebbles. Approximately 120 feet (37 m) thick
- PMa** Amsden Formation—Divided into three members but mapped as a single unit. Upper Ranchester Limestone Member is mainly yellow-gray-weathering dolomite and dolomitic limestone with some sandstone, shale, and gray- to purple-weathering limestone. Middle Horseshoe Shale Member is principally shale, siltstone, and mudstone that weathers red or purple. Basal Darwin Sandstone Member is pinkish white, fine- to medium-grained sandstone, well indurated, with red stain; locally present filling paleokarst features in underlying Madison Limestone. Total thickness ranges from 150 to 200 feet (46 to 61 m)
- Mm** Madison Limestone—Light gray to light brown, mainly limestone and dolomite with abundant crinoid fragments and other bioclastic material. Uppermost member, the Bull Ridge Member, is often stained red by sediments from the overlying Amsden Formation and contains sinkholes and solution cavities. Thickness of formation is approximately 600 feet (180 m)
- Dd** Darby Formation—Grayish, yellowish, and greenish dolomite, finely crystalline to micro-crystalline; interbedded with sparse dolomitic shale and siltstone; approximately 100 feet (30 m) thick
- Obh** Big Horn Dolomite—White to cream and light brown to dark brown, finely crystalline to sucrosic dolomite with some chert; deeply pitted on surface; thin-bedded at top, then massive unit to base of exposure. Thickness ranges from 450 to 500 feet (140 to 150 m), but only upper 200 feet (61 m) exposed in quadrangle
- Cu** Cambrian rocks undivided—Shown only on cross section; includes from top to base the Gallatin Limestone, 500 to 800 feet (150 to 240 m) thick (Noggle-Perrin, 1989, and Finley, 1985); Gros Ventre Formation, 420 to 500 feet (130 to 150 m) thick (Finley, 1985, and Noggle-Perrin, 1989); and Flathead Sandstone, 10 to 200 feet (3 to 61 m) thick (Noggle-Perrin, 1989)

MAP SYMBOLS

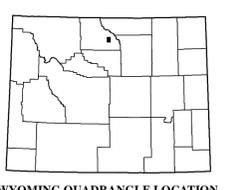
- Formation contact—Dashed where approximately located
- Tar sand deposit boundary—Dashed where covered or discontinuous
- Anticline axis—Dashed where approximately located
- Syncline axis—Dashed where approximately located
- Measured sections in Tensleep Sandstone—Graphic representations are shown in Figure 6 of Ver Ploeg and De Bruin, 1985
- Line of cross section
- Strike and dip of beds

REFERENCES CITED

Finley, M.E., 1985. Geologic map of Black Mountain Quadrangle, Wyoming: Wyoming State Geological Survey Map Series 16, scale 1:24,000, color.

Noggle-Perrin, K., 1985. Geologic map of the Leavitt Reservoir Quadrangle, Wyoming: Wyoming State Geological Survey Map Series 29, scale 1:24,000, color.

Ver Ploeg, A.J., and De Bruin, R.H., 1985. Trapper Canyon tar sand deposit, Big Horn County, Wyoming: An exhumed stratigraphic oil trap. Wyoming State Geological Survey Report of Investigations No. 30, 34 p., 1- pl. map, scale 1:24,000, color.



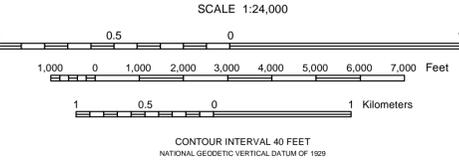
WYOMING QUADRANGLE LOCATION

Base map from U.S. Geological Survey 1:24,000-scale topographic map of the Bush Butte, Wyoming Quadrangle, 1960.

Projection: Universal Transverse Mercator (UTM), zone 13  
North American Datum of 1927 (NAD 27)  
10,000-foot grid ticks: UTM, zone 13  
10,000-foot grid ticks: Wyoming State Plane Coordinate System, East Central zone

A digital version of this map is also available on CD-ROM.

Wyoming State Geological Survey  
P.O. Box 1347 - Laramie, WY 82073-1347  
Phone: (307) 766-2286 - Fax: (307) 766-2605  
Email: sales-wsgs@uwyo.edu



Geology mapped in 1982, revised 2008  
Digital cartography by Thomas E. Ver Ploeg

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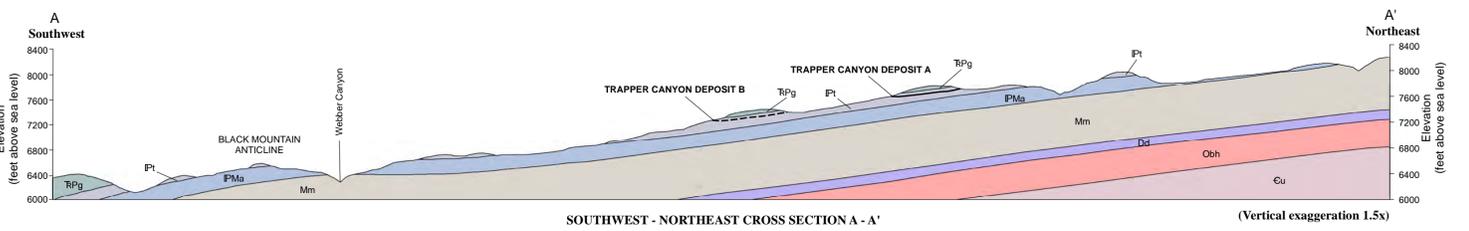
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GEOLOGIC MAP OF THE BUSH BUTTE QUADRANGLE, BIG HORN COUNTY, WYOMING

by  
Alan J. Ver Ploeg and Rodney H. De Bruin  
2013